

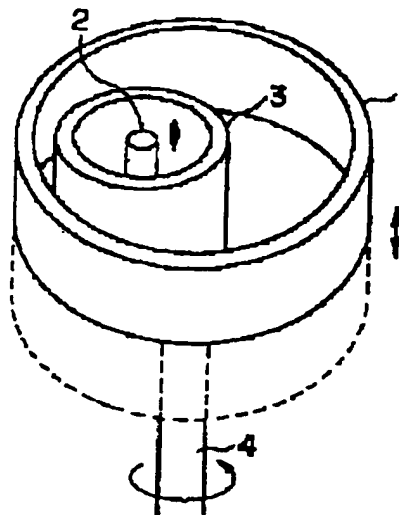
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TITLE : SPUTTERING DEVICE



ABSTRACT : PURPOSE: To enhance the utilization efficiency of a target without generating foreign matter on its front surface by composing a magnetic field generating means arranged behind the target of a magnet which moves periodically in a perpendicular direction and a magnet which moves periodically within a parallel plane.

CONSTITUTION: Sputtering is executed by arranging the magnetic field generating means behind the target consisting of an oxide sintered compact, such as ITO, and generating high-density plasma on the target surface. For example, the annular magnets 1, 3 and the columnar magnet 2 are disposed as the magnetic field generating means. Further, the large ring magnet 1 is made to move vertically and periodically in the perpendicular direction of the target surface and the columnar magnet 2 is revolved and moved periodically within the plane parallel with the vertical periodic motion in the perpendicular direction of the target surface. The small ring magnet 3 is revolved and moved periodically within the parallel plane. As a result, the high-density is rapidly and locally generated on the target 1 and the sputtering is uniformly executed by moving the generating point over the entire part.

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